

(Abstract)

In a film-forming process of depositing gaseous molecules each composed of plural atoms onto a substrate or reacting the gaseous molecules with the constituting elements of the substrate to form a compound film onto the substrate, the plasma, having the excited inert gaseous molecules having higher quasi-stable level energies than the ones requiring to dissociate the gaseous molecules into their atomicity elements and the gaseous molecules, is generated and then, the gaseous molecules are dissociated into their atomicity elements before the depositing into the substrate. As a result, the dissociation of the gaseous molecules onto the substrate is not required, leading to the lowering of the film-forming process.

00810-PCT/JP99/01429